

ABSTRACT

The focal surface for an opto-electronic imaging system includes an arrangement of detectors for image recording and a detector carrier or a FPA carrier for holding the detectors. The detectors are each made of at least one solid state element that is bonded to a flexible carrier substrate. The focal surface, or the detectors, respectively, exhibits a curvature, such that a curved field of view can be recorded. In a method for manufacturing a focal surface for opto-electronic imaging systems, at least one solid state element is bonded to a flexible carrier substrate to form flexible detectors, whereby a detector carrier provides a curvature and the flexible detectors are adapted to the curvature of the detector carrier. To manufacture a detector according to the present invention, a solid state element is thinned and bonded to a flexible carrier substrate, such that it is formed in a flexible manner and can be adapted to a curvature of a field of view. An opto-electronic imaging system according to the present invention with front optics for capturing an image and a detector arrangement that is arranged in a focal surface of the front optics, in which the detector arrangement is arranged in the focal surface in a curved manner.